APPENDIX 8: – Visual Inspection Form For Outfalls and Receiving Waters

Municipality of Anchorage

VISUAL INSPECTION FORM

Department of Public Works — WATERSHED MANAGEMENT

Outfall Number: _____

Part 1 General Information

1. Map to location is? ☐ OK ☐ Incorrect, explain in Part 4, Comments
2. Date: _____ ☐ Time: _____ ☐ Inspection Crew Lead: _____
3. How long since last rainfall? ☐ Raining now ☐ 0-2 days ☐ 3 or more days ☐ Unknown
4. Access to end of pipe is? ☐ OK ☐ Far from road, _____ feet ☐ Steep ☐ Ground wet or soft ☐ Blocked ✪

If blocked, by what? ☐ Fence gate/unlocked ☐ Fence gate/locked ☐ Vegetation ☐ Water ☐ Other: _____

Part 2 End-of-Pipe Information

5. End of pipe flows into: ☐ Lake ☐ Stream ☐ Wetland ☐ Ditch ☐ Other _____
6. End of pipe submerged? ☐ No ☐ Yes *If yes, how much?* ☐ less than 25% ☐ about 50% ☐ more than 50%
7. End of pipe crushed? ☐ No ☐ Yes *If yes, how much?* ☐ less than 25% ☐ about 50% ✪ ☐ almost closed ✪
8. Grate on end of pipe? ☐ No ☐ Yes *If yes, is grate locked?* ☐ No ☐ Yes

If yes, is grate plugged? ☐ less than 25% ☐ about 50% ✪ ☐ almost closed ✪

Part 3 Visual Observations

9. Water flowing from end of pipe? ☐ No ☐ Yes

If yes, what does water look like? ☐ Clear ☐ Colored, what color? _____ ☐ Muddy

If yes, are petroleum products present? ☐ No ☐ Yes, in the form of: ☐ Floating globs ☐ Moving sheen

10. Sediment accumulation in pipe? ☐ No ☐ Yes

If yes, how much? ☐ less than 25% full ☐ about 50% full ✪ ☐ more than 50% full ✪

11. Debris accumulation in pipe? ☐ No ☐ Yes

If yes, how much? ☐ less than 25% full ☐ about 50% full ✪ ☐ more than 50% full ✪

Describe debris: _____

12. If end of pipe flows to a ditch, is there (near end of pipe):

Sediment accumulation in ditch? ☐ No ☐ Yes

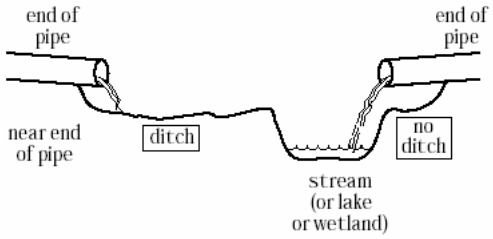
If yes, how much? ☐ less than 25% full ☐ about 50% full ✪ ☐ more than 50% full ✪

Debris accumulation in ditch? ☐ No ☐ Yes

If yes, how much? ☐ less than 25% full ☐ about 50% full ✪ ☐ more than 50% full ✪

Describe debris: _____

Part 4 Comments



NOTE: If the answer to a question has this symbol ✪ next to the entry, flag this form for a supervisor's attention by placing an "x" in the box to the right. ☐

INSTRUCTIONS FOR COMPLETION OF THE VISUAL INSPECTION FORM

A separate form must be filled out for each major outfall. Answer all questions on the form.

PART 1 GENERAL INFORMATION

1. ***Map to Location, and Outfall Number:*** Verify the map guiding you to the outfall location is accurate. Make location corrections to the map and/or in the inspection form, Part 3, Comments. If the outfall cannot be found based on inspection crew experience or map information make a note and return the uncompleted form and map to supervisor.
2. ***Outfall Number, Date, Time and Field Crew Lead.*** When you arrive at an outfall to conduct the inspection, write the outfall identification number on the inspection form. The outfall identification number can be found on the location map. Record the date and time the inspection is made. Fill in the name of the field crew lead conducting the inspection.
3. ***How Long Since Last Rainfall?*** Check the box that best represents when the last rainfall occurred. **"Rainfall"** is defined as a rainstorm big enough to cause runoff from the streets to enter the local storm drains being inspected. Indicate if you do not know the date of the last rainfall.

PART 2 VISUAL OBSERVATIONS

The "**end-of-pipe**" is defined as the open-end of a pipe discharging storm water from a piped storm water conveyance system into the environment.

4. ***Water Flowing from End-of-Pipe?*** Check the NO box if there is no water flowing out of the end-of-pipe. Note: If you see standing water in the end-of-pipe or the end-of-pipe is partially submerged in water and you cannot determine if the water is actually flowing out of the pipe, also check the NO box. Check the YES box only if water is flowing out of the end-of-pipe. If you checked the YES box, you also need to answer the questions about the quality of the water flowing out of the pipe. Check the appropriate boxes for the water quality questions.

If yes, what does water look like?

Clear (not colored): Imagine a glass of drinking water, you can see through the water and the water is not colored. Is this what the water flowing from the end-of-pipe looks like?

Colored: Imagine a glass of tea, you can see through the water, but the water is colored. Is this what the water looks like? Be careful not to let the color of subsurface objects fool you. For example, green algae under the water can give water the appearance of being green. Color can range from light to dark. If the water seems very lightly colored but you are in doubt, do not mark the "Colored" box.

Muddy: You cannot see through the water (it has a cloudy or muddy appearance).

If yes, are petroleum products present in water? Imagine pouring new or used motor oil into water. Do you see this effect in the water flowing from the end-of-pipe? Unless you see floating globs or a moving sheen of oil in the water mark NO.

5. ***Sediment Accumulation in Pipe?*** If you can see sediment in the pipe, check the YES box. Then estimate how much sediment is present in the pipe (less than ¼ full, about ½ full, or more than ½ full) and check the appropriate box.

Note: If you checked the "about ½ full" or "more than ½ full" box, also check the box at the bottom of the page to flag the form for a supervisor's attention.

6. ***Debris Accumulation in Pipe?*** If you see any debris piled up in the pipe, check the YES box. Then estimate how much debris is present in the pipe (less than ¼ full, about ½ full, or more than ½ full) and check the appropriate box.

Note: If you checked the "about ½ full" or "more than ½ full" box, also check the box at the bottom of the page to flag the form for a supervisor's attention.

7. ***If the "End of Pipe" Flows into a Ditch, is there (near end of pipe) Sediment Accumulation in Ditch?*** If you can see sediment in the pipe, check the YES box. Then estimate how much sediment is present in the pipe (less than ¼ full, about ½ full, or more than ½ full) and check the appropriate box.

Note: If you checked the "about ½ full" or "more than ½ full" box, also check the box at the bottom of the page to flag the form for a supervisor's attention.

Debris Accumulation in Ditch? If you see any debris piled up in the pipe, check the YES box. Then estimate how much debris is present in the pipe (less than ¼ full, about ½ full, or more than ½ full) and check the appropriate box.

Note: If you checked the "about ½ full" or "more than ½ full" box, also check the box at the bottom of the page to flag the form for a supervisor's attention.

PART 3 COMMENTS

As needed, explain answers in Parts 1-2. Record anything unusual about the site not covered by the questions on the form.

FIELD EQUIPMENT CHECKLIST

❒ Appropriate protective work clothing and boots ❒ Safety and communication equipment ❒ Outfall location maps ❒ Clipboard
❒ Major outfall identification number list ❒ Visual Inspection Forms ❒ Pencil or Waterproof permanent ink pen

Part 5: Receiving Water Observations:

Location and name of receiving water:

Outfall discharges to freshwater : Stream ___ Lake _____ Wetland

Outfall discharges to marine water: Estuary Puget Sound

Outfall discharges to ground:

Is receiving water - Clear _____ Colored _____ Muddy _____ Oil Sheen

Odor : Rotten Eggs _____Petroleum Other:

Comments: (Is bank eroded? Vegetation on bank to water? Is water flowing or stagnant?)